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Finding our Voice

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Mounting Evidence of Toxicity in Pesticides Prompts Action in Takoma Park

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Americans have been led to believe they need poisons to keep their yard pretty and pest-free. According to the Environmental Protection Agency (EPA), we use 67 million tons of chemicals on our lawns each year, dropping over \$700 million for the privilege of contaminating our surroundings and ourselves. Homeowners use 10 times the amount of pesticides per acre that farmers do. If you've been using them and haven't considered how hazardous they are, just look at the evidence.

The good news is that Takoma Park has recently taken bold steps to limit the amount of chemical poisons that can be applied. The Safe Grow Zone Act Ordinance was proposed by Takoma Park residents Catherine Cummings and Julie Taddeo several months ago as an effort to restrict the use of pesticides they say are harmful to residents' health and the environment. Many hope that the limited use of pesticides will become the standard for communities throughout Maryland, following the example of the folks in Canada who have been systematically taking pesticides and herbicides off the market for the past 20 years. For example, the government of Ontario has banned these products and publically stated that, "...the use of pesticides to control weeds and insects for purely cosmetic reasons presents an unnecessary risk to our families and pets, especially when we can have healthier lawns and gardens without chemicals."

One obvious problem about the way chemicals are applied is that only 35% of fertilizer reaches the target plants, and only 2% of pesticides reach the target pests. All the rest goes into storm water run-off, our water-table and lakes, rivers, bays and oceans. (See the Rodale Institute <http://rodaleinstitute.org/>)

Another problem is that toxic particles can drift several feet, or even many miles, depending on the method of application and other factors. For example, you may intend to eradicate only the aphids on your red milkweed plants, but unless applied very carefully, even a slight bit of wind will carry the poison to other plants. Not only that, but all insects on the milkweeds will die, including any Monarch butterfly caterpillars caught in the spray. Insects on nearby plants may be killed, too. Until it breaks down, which can be as quickly as 24 hours or as long as many years, the product will kill all hapless insects who crawl on, land on or brush against those plants. There are currently few legal rights against pesticide drift, despite the mounting evidence that these pesticides are killing us and our pets, and poisoning our environment. The current regulatory system favors pesticide applicators and manufacturers and places the burden of proof on victims of pesticide poisoning.

Homeowners and municipalities may have to adjust their expectations of what constitutes a beautiful lawn and a pristine garden as we weigh the benefits of these expectations against the ravages that chemicals are creating in our environment. Meanwhile, the proof of the factors in why we should ban these products continues to stack up from scientific sources. Below are just a few of the reasons to not use the weed killer known as Roundup as well as other pesticides. Many of these are from www.SafeLawns.org

HUMAN HEALTH — The product can cause an increase in human disease due to the way Roundup causes restriction of nutrients such as calcium (which affects bone density), iron (blood), manganese, zinc (liver, kidney) and copper, magnesium (brain). Tests show an “inert” ingredient in Roundup, polyethoxylated tallowamine, or POEA, kills human cells. Traces of Roundup found on corn and soybeans, among other crops, can cause cell damage in humans.

PLANT HEALTH — Roundup increases plant stress and disease due to its interaction with biology in the soil. In some cases, the plant toxicity can have residual negative impacts on animals and humans.

NUTRIENT REDUCTION — Widespread use of the product reduces the nutrient value of food because the Roundup binds and inhibits the movement of essential micronutrients.

MUTANT WEEDS — After nearly four decades of use, many areas of the country are seeing an increase in new species of weeds resistant to Roundup.

PESTICIDE RELIANCE — Since the introduction of “Roundup Ready” genetically modified plants in 1996, use of Roundup has increased exponentially. Uses of other pesticides have also increased due to additional weed, insect and disease pressure caused by over reliance on Roundup.

YIELD REDUCTION — Farmers generally see a significant decrease in the yields of fields after the first two years using Roundup.

SPECIES REDUCTION — Roundup causes the destruction of important soil flora, plants that are important in nitrogen fixation, mineralization, and other soil fertility processes. Every year as many as 60-70 million birds die from pesticides, and this number is considered by some researchers to be a conservative estimate. In the Mississippi River, mosquito fish were found to contain so much poison that Dr. Denzel B. Ferguson of the Mississippi State University zoology department declared: “These fish are living bombs. Anything that comes along and eats them is just doomed.”

WATER QUALITY — Roundup causes increased leaching of phosphorus and other nutrients into waterways. Additionally, scientists have identified an emerging class of contaminants in the Potomac River, called endocrine-disrupting compounds (EDCs), a variety of natural and manmade chemicals from many sources which cannot be removed from our drinking water. All water on earth now contains traces of pesticides.

DEATH — In the U.S., about one of every 16 calls to poison control centers every year is because of pesticide poisoning and death. Reports indicate pesticides have been responsible for chronic health problems that include neurological disorders, cancer, reproductive difficulties and impaired infant development. Worldwide, every year 220,000 people die from pesticide poisoning.

ADDITIONAL GMOS — As more and more weeds mutate and become resistant to Roundup, the pesticide industry races to develop more genetically modified plants. News out of the University of Missouri states that researchers there plan to genetically modify plants to resist the herbicide 2,4-D, a product that has been shown in peer-reviewed scientific journals to increase the likelihood of non-Hodgkin’s lymphoma, endocrine disruption, reproductive and developmental effects, as well as water contamination and toxicity to aquatic organisms.

You have the right to ask your lawn or garden care company for a copy of the label from the products that are being applied to your property. You will probably be surprised that even companies with the word “green” or “safe” in their names are using a frightening toxic soup of chemicals. As the debate over pesticide use in our environment continues, there is great truth to the axioms to think globally and act locally, and to do no harm. Are you willing to take action to reduce the numbers of chemicals that you contribute to the environment?

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